Western assures NERC of Y2K readiness

Joining electric power utilities across North America, Western sent a year 2000 assurance letter in June to the North American Electric Reliability Council. In the letter, Administrator **Mike Hacskaylo** stated that, with limited exceptions, Western is Y2K ready.

Specifically, Western's mission-critical systems and related supporting equipment that deliver electricity are ready for Y2K-associated date changes. Western made this assurance based on the work of many employees over the past two years.

The letter stated, "Western has worked diligently toward replacing, repairing or otherwise addressing deficient items in our critical systems. Thus, we believe the organization's primary functions related to…delivery of electricity will continue reliably through Y2K dates."

Western reported only seven exceptions. None pose significant risks to the overall reliability of the electric system.

Like all electric utilities in the nation, Western reported to NERC monthly for the past year regarding its progress in various categories, including energy management and Supervisory Control and Data Acquisition systems, telecommunication and substation controls and system protection. In June we raised all Y2K-readiness completion figures to 100 percent, based on NERC's definition of mission-critical.

Embedded systems testing all but complete

With CPO support, Western regional staffs have completed Y2K testing on power system operation equipment, which often contain computer chips known as embedded systems. Upgrades and replacements needed to make equipment Y2K ready are ongoing and are expected to be complete by the end of September. This work directly supports the Y2K readiness assurance and completion data reported to NERC.

Western has three testing teams: telecommunications, relays and controls. **Dennis Carr** at CSO serves as point of contact for the program. Results generally indicate nothing will fail to function and disrupt power flow. Specific results include:

- No functional problems with relays.
- Upgrades completed on some telecommunication equipment (most are compliant or not date sensitive).
- Replacement or upgrades made on certain revenue-meter models (ongoing in some regions).
- Upgrades continue on a few controls, including Intelligent System Integrated Substation.

Robert Reis, a Y2K team member in the North Dakota Maintenance Office, said his office is 95-percent complete or "well ahead of schedule in upgrading all revenue meters." He said Y2K should be a "non-event for system protection and revenue-metering functions."

In the Desert Southwest Region, Y2K testing of protective relays and revenue meters was completed before the March 31 deadline. "Test results are in agreement with Y2K compliance certifications," said **Mike Agudo**, a protection engineer.

Jim McHan, Y2K Maintenance coordinator for Sierra Nevada Region, said tests and modifications on equipment are 99- percent complete. "We have not found anything that would have affected the reliable operation of our power system facilities," he said.

DOE gives Western 'thumbs up'

A Department of Energy Y2K review team concluded it is "very comfortable" with Western's Y2K preparedness. Conducting a CSO site visit June 29 and a Rocky Mountain Region visit June 30, DOE team members said Western has no significant problems.

CSO staff briefed DOE officials on Western's activities related to contingency planning, end-to-end testing, mission-critical systems, nonmission-critical systems, configuration management and other issues. RM also covered many of the same wwwwwwwissues from a regional perspective and gave DOE an in-depth briefing on RM's SCADA system.

According to Y2K Project Manager **Don Nord**, one of DOE's objectives was to gain a better understanding of what Western does and how it relates toY2K. The visit included discussions about the power industry and Western's role in it.

"Everyone, both at CSO and RM, did a very good job of presenting the information to the review team," Nord said. "They demonstrated Western's readiness and expertise."